

IX.—Notes on *Pardalina Warwickii*, Gray, *Felis guigna*, Molina, and *Felis Geoffroyi*, D'Orbigny. By Dr. J. E. GRAY, F.R.S. &c.

MANY years ago there was in the Surrey Zoological Gardens an animal shown as the "Himalaya Cat," which is figured by Colonel Hamilton Smith in Jardine's 'Naturalist's Library,' but not very characteristically, under the name of *Felis himalayana*, Warwick. When the animal died it was preserved in the British Museum, and recorded in the 'List of Mammalia in the British Museum,' published in 1842, under the name of *Leopardus himalayanus*. Mr. Blyth, in the "Species of the genus *Felis*" (P. Z. S. 1863, p. 184), puts *F. himalayana* of Warwick as a synonym of *Felis viverrina*, Bennett, and, not recollecting that Warwick's cat and the one in the Museum were the same specimen, he puts in "not of Gray;" and in a note he says, "*F. himalayana* is perhaps *F. celidogaster* of Temminck," which he gives as a synonym of *Felis viverrina*, Bennett. In fact the synonyma are the regular confusion of a compiler, which is easily to be understood and apologized for in Mr. Blyth's case, but should be a caution to compilers.

When this cat was alive it was just the time that we began to receive fine skins of animals from the Himalayas; and there was an inclination of the dealers to give Himalaya as the habitat of animals of which they did not know whence they came, as animals from that country were interesting and fetched a good price; but numerous collectors and sportsmen who have searched that country assure me that the cat is not found there, or at least has not occurred to them; and it has been suggested by Mr. Blyth and others that it may be an inhabitant of South America; but I have not seen any specimens from there.

In the 'Proc. Zool. Soc.' for 1867, on account of the length of the brain-case of the skull, and shortness of the face and convexity of the forehead, I formed for this cat a genus under the name of *Pardalina*, and gave it the specific name of *Warwickii*, because the name of *himalayanus* might lead to misconception, and figured the skull (P. Z. S. 1867, p. 267, fig. 4; and Cat. Carniv. p. 15, fig. 4)

D'Orbigny and Gervais, in the 'Bull. Soc. Philomat. Paris,' 1844, p. 40, and in the 'Voy. Amér. Mérid.' p. 21, t. xiv. (animal), & t. xiii. fig. 1 (skull), figure a cat from Rio Negro, in the pampas of Buenos Ayres, under the name of *Felis Geoffroyi*, which they compare to the Ocelot Chati and Margay, and to the *Felis guigna* of Molina, which I had not thought of comparing with it when I wrote the paper in the 'Proceedings,' not thinking it likely that a cat from India and one from

South America were the same; but Dr. Sclater (P. Z. S. 1870, p. 796) observes:—"The so-called *Felis Warwickii* being now dead, I have been able to examine it more carefully, and find it to belong to a well-known South-American species, *Felis Geoffroyi* of D'Orbigny and Gervais;" and this theory is adopted by Mr. Elliot (P. Z. S. 1872, p. 203).

The specimen of *P. Warwickii* and the figure of *F. Geoffroyi* bear a general resemblance, but they appear to me very different. The specimen in the Museum is much more spotted, and the spots of the back are smaller and more numerous; the throat, chest, and belly are largely spotted. The throat is said to be whitish in M. d'Orbigny's description; and the belly of of his figure is not spotted at all; but this might be a variation, though I should not think it probable.

M. Gervais figures the skull of the South-American cat; and when his figure and the figure of the skull of *Pardalina Warwickii* are compared, and his figure with the skull itself, though they agree in the length of the brain-case, they differ greatly in the form and outline of the face, and especially in the outline of the lower jaw; so that I have little doubt that they are distinct, though both may belong to the genus *Pardalina*.

Molina, in his work on Chili, described a species under the name of *Felis guigna*. MM. d'Orbigny and Gervais asked, "Mais qu'est-ce que c'est que le *Felis guigna*?" Dr. A. Philippi has described and figured this species and its skull in Wiegmann's 'Archiv f. Naturg.' 1873, p. 8, t. ii. (animal), & t. iii. figs. 2 & 3 (skull). The figure of the animal nearly agrees with the figure of *Felis Geoffroyi*, and differs from the specimen of *Pardalina Warwickii* in the Museum in the fewness of the spots on the neck, and in the chest and belly (according to both figure and description) being white and spotless. The skull figured is that of a young animal, and appears to differ only in age from that figured by D'Orbigny and Gervais; and there can be no doubt that *Felis Geoffroyi* of D'Orbigny and Gervais is the same as *F. guigna* of Molina and Philippi.

Therefore the synonyma of the species will run thus:—

*Pardalina Warwickii*.

Belly closely spotted.

*Felis himalayanus*, Warwick, Jardine's Naturalist's Library, t. xxiv.

*Pardalina Warwickii*, Gray, Proc. Zool. Soc. 1867, p. 257, fig. (skull);

Cat. Carniv. p. 15, fig. (skull).

*Felis Geoffroyi*, Sclater, Proc. Zool. Soc. 1870, p. 796; Elliot, Proc. Zool. Soc. 1872, p. 203.

*Hab.* Unknown.

The British Museum has just received from Mendoza, in the Argentine Andes, a small female kitten of this species. The back has very numerous small brownish spots, and the belly is covered all over with many larger black spots like the adult. It is very different from D'Orbigny's figure of *Felis Geoffroyi* from the Pampas and Philippi's *Felis guigna*, which have a plain white belly.

*Pardalina? guigna.*

Belly white, spotless.

*Felis guigna*, Molina, Chili; Philippi, Wieg. Archiv f. Naturg. 1873, t. ii. figs. 1 (animal), 2, 3 (skull).

*Felis Geoffroyi*, D'Orbigny, Voy. Amér. Mérid. p. 21, t. xiii. (animal), t. xii. f. 1 (skull).

*Hab.* Pampas, Buenos Ayres.

Mr. Elliot, in 'Proc. Zool. Soc.' 1872, states that the typical specimen of *Felis pardinoïdes*, Gray (P. Z. S. 1867, p. 400, & Cat. Carniv. B. M. p. 27), is a young specimen of *Felis Geoffroyi*, which he identified with a young specimen marked *F. Geoffroyi* in the museum at Leyden, observing that "the general colour of the animal, with its lengthened annulated tail, is precisely that of the typical *F. Geoffroyi*," adopting Mr. Selater's opinion that "the *Pardalina Warwickii*, Gray, is also *F. Geoffroyi*," and that "the synonymy of this species will therefore be somewhat as follows," in which he makes all these one species.

The specimen of *Felis pardinoïdes* here referred to was received from the Zoological Society's museum in 1855, marked as having been presented to the Society by Capt. Innes and as coming from India, as recorded in the 'Proc. Zool. Soc.' 1867, p. 400, and 'Catalogue of Carnivora in the British Museum,' p. 27. I have named the animal *Felis pardinoïdes*, because the form of the spots with a light centre has a certain resemblance to those of the American ocelots. I will not undertake to vouch for the accuracy of the habitats we receive from the Zoological Society; the Indian habitat has not been confirmed; and the species has a very South-American aspect. The specimen has not the slightest resemblance in its general coloration to the specimen of *Pardalina Warwickii* in the Museum, or to the figure of *Felis Geoffroyi* of D'Orbigny's 'Voyage.' I think it will be an astonishment to every one who has the slightest pretension to be a zoologist that they should have been regarded as belonging to the same species.

We received from the Zoological Society along with the specimen of *Felis pardinoides* the skull belonging to it, which is described in the 'Proceedings' and 'Catalogue.' This skull has a sloping forehead and a well-developed face, quite different from the skull of *Pardalina Warwickii*, more like the skull of an ocelot, showing that it has no relation whatever to the genus *Pardalina*. It is true that it shows the animal is not aged; but the skull is perfectly developed, and is evidently that of a fully grown animal, and therefore does not justify Mr. Elliot's assertion that the "typical specimen is not an adult animal."

It is greatly to be regretted that Mr. Elliot did not take the trouble to compare the two skulls in the Museum before he made such a random assertion as that *F. pardinoides* is the same as *F. Geoffroyi*.

*Pardalina Warwickii* and the figure of *Felis guigna* have an immense number of small, rather unequal-sized, moderately closely placed solid black spots on the upper part of the body; those near the centre of the back are smaller, but not united into lines: and *P. Warwickii* has larger spots on the underside of the body, which are largest in the central line; these, according to the description and figures, are entirely wanting in *Felis guigna*. The tails are cylindrical and blunt at the end.

*Felis pardinoides*, on the contrary, has large-sized spots of a squarish form, with a pale centre, placed in about four series, more or less interrupted or irregular, on each side of the body; the vertebral line is marked with a narrow continuous line, which is forked, and more or less continued in front between the shoulders, and with a series of spots on each side of it, which are much smaller than those on the sides of the body; the tail is rather thick, the hinder half tapering to a point. The spot with the pale centre sometimes shows a likeness to the "rose" (that is to say, the spot formed of a ring of small spots with a pale centre) found in the American cats; hence the name of *pardinoides*. There is nothing of this kind to be seen in *P. Warwickii*, where the small spots are all equally separated.

X.—Notes on the Smaller Spotted Cats of Asia and its Islands. By Dr. J. E. GRAY, F.R.S. &c.

MR. BLYTH, in his paper on the Asiatic species of the genus *Felis* (P. Z. S. 1863, p. 184) regards *Felis nipalensis* and *F.*